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EXAMINER

BODDIE, WILLIAM

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/612,655

Filing Date: July 02, 2003

Appellant(s): DEPUE ET AL.

Theodore D. Fay III
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 2nd, 2006 appealing from the Office action mailed March 31st, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(9) Grounds of Rejection

Art Unit: 2629

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-9 and 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher et al. (US 6,476,795) in view of Koripella et al. (US 6,387,559).

With respect to claim 1, Derocher discloses, a wireless optical navigation device (fig. 2) comprising: an optical position tracking system (col. 3, lines 40-43); a transmitter electrically coupled to said optical position tracking system (52 in fig. 2).

Derocher does not expressly disclose a micro fuel cell electrically coupled to said transmitter and said optical position tracking system, said micro fuel cell capable of providing electrical power for said optical position tracking system and said transmitter.

Koripella discloses a micro fuel cell (fig. 3) electrically capable of providing electrical power (col. 6, lines 1-4).

Derocher and Koripella are analogous art because they are directed at a similar problem solving area, namely powering handheld electronic devices (Koripella, 60 in fig. 3).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the portable device fuel cell taught by Koripella on the wireless optical mouse disclosed by Derocher.

The motivation for doing so would have been to lengthen the battery life of the device and thus decrease the frequency that the battery needs to be recharged.

Therefore it would have been obvious to combine Koripella with Derocher for the benefit of longer battery life to obtain the invention as specified in claim 1.

With respect to claim 2, Derocher discloses, wherein said transmitter is an infrared type transmitter (col. 3, lines 15-18).

With respect to claim 3, Koripella discloses wherein said micro fuel cell is a direct methanol micro fuel cell (col. 1, lines 5-10).

With respect to claim 4, Koripella discloses wherein said micro fuel cell is a water recycling micro fuel cell (col. 4, lines 12-15).

With respect to claim 5, Koripella discloses wherein said micro fuel cell comprises a MEMS pump (40 in fig. 3).

With respect to claim 6, Koripella discloses wherein said micro fuel cell comprises microchannel structures for waste gas removal (col. 6, lines 6-9 and 44 in fig. 3).

With respect to claim 7, Koripella discloses wherein said micro fuel cell comprises microchannel structures for water recovery (col. 2, lines 23-25 and col. 4, lines 3-8).

With respect to claim 8, Koripella discloses the apparatus further comprising a replaceable fuel cartridge (35 in fig. 1 and col. 4, lines 14-18).

With respect to claim 9, Koripella discloses wherein said replaceable fuel cartridge contains methanol (col. 4, lines 14-18).

With respect to claim 12, Koripella discloses the apparatus further comprising a rechargeable battery that is electrically coupled to said micro fuel cell and said optical position tracking system (64 in fig. 3).

With respect to claim 13, Derocher and Koripella disclose the apparatus of claim 12 (see above).

Derocher further discloses that the rechargeable battery is preferably a lithium ion type battery (col. 3, lines 50-53), a type that would include polymer lithium batteries.

Derocher and Koripella do not expressly disclose, wherein said battery is specifically a polymer lithium battery.

It would have been obvious to one of ordinary skill in the art to use a polymer lithium battery as the type of lithium ion type battery taught by Derocher.

The motivation for doing so would have been that polymer lithium batteries are typically lighter than other batteries and also allow for specific shaping of the battery to a desired form.

Therefore it would have been obvious to combine Derocher and Koripella for the reasons given above to obtain the invention as specified in claim 13.

With respect to claim 14-20, the method for making a device of claim 1 is inherent. Therefore claim 14 and all of its identical dependent claims (claims 16-20) are rejected on the same merits as shown above.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher in view of Koripella as applied to claim 8 above, and further in view of Hirsch et al. (US 6,924,055).

Derocher and Koripella do not expressly disclose, wherein said replaceable fuel cartridge includes a fuel membrane.

Hirsch discloses wherein said replaceable fuel cartridge includes a fuel membrane (50 in fig. 2, and col. 6, last paragraph).

Derocher, Koripella, and Hirsh are all analogous art because they are directed to a similar problem solving area, namely powering portable devices.

At the time of the invention it would have been obvious to include the fuel cell powered mouse taught by Derocher and Koripella with a membrane in the fuel cartridge.

The motivation for doing so would have been in order to encourage flow into the anode chamber and to limit backflow of fuel from the anode chamber to the fuel delivery cartridge (Hirsch, col. 6, lines 50-56).

Therefore it would have been obvious to combine Hirsch with Derocher and Koripella for the benefit of encouraging flow and limiting backflow to obtain the invention as specified in claim 10.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher in view of Koripella as applied to claim 1 above, and further in view of Peng (US 6,686,903).

Derocher and Koripella do not expressly disclose, an apparatus further comprising a capacitor that is electrically coupled to said micro fuel cell and said optical position tracking system.

Peng discloses, an apparatus further comprising a capacitor that is electrically coupled to said micro fuel cell and said optical position tracking system (209 in fig. 2).

Art Unit: 2629

Derocher, Koripella, and Peng are all analogous art because they are directed to a similar problem solving area, namely powering wireless handheld devices.

At the time of the invention it would have been obvious to include a capacitor in the circuitry of the fuel cell powered mouse taught by Derocher and Koripella.

The motivation for doing so would have been to regulate the output voltage (Peng, col. 3, lines 43-45).

Therefore, it would have been obvious to combine Peng with Koripella and Derocher for the benefit of regulating the voltage to obtain the invention as specified in claim 11.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher in view of Koripella as applied to claim 1 above, and further in view of Freathy et al. (US 6,774,797).

Derocher further discloses that the rechargeable battery is preferably a lithium ion type battery, a type that would include polymer lithium batteries.

Derocher and Koripella do not expressly disclose, wherein said battery is specifically a polymer lithium battery.

It would have been obvious to one of ordinary skill in the art to use a polymer lithium battery as the type of lithium ion type battery taught by Derocher.

Freathy discloses, the specific use of a polymer lithium battery. (col. 4, lines 41-43).

Derocher, Koripella, and Freathy are all analogous art because they are directed to a similar problem solving area, namely powering portable wireless devices.

At the time of the invention it would have been obvious to use a polymer lithium battery as the rechargeable battery type.

The motivation for doing so would have been that polymer lithium batteries are typically lighter than other batteries and also allow for specific shaping of the battery to a desired form.

Therefore, it would have been obvious to combine Freathy with Koripella and Derocher for the benefit of less weight to obtain the invention as specified in claim 13.

(10) Response to Arguments

A. GROUND OF REJECTION 1 (Claims 1-9 and 12-20)

In pages 8-19, the Applicants address the rejection of claim 1 in three sections. Section A.1 addresses the core arguments behind the rejections. Section A.2 traverses the arguments made by the Examiner in an office action dated January 12th, 2006. Finally, section A.3 traverses the arguments presented by the Examiner in an office action dated May 31st, 2006. For ease of reference, the Examiner has used the same headings used by the Applicants in the Appeal Brief.

A.1 Response to Rejections

Claims 1-9 and 12-20 have been rejected under 35 U.S.C. 103 (a) as being unpatentable over Derocher et al. (US 6,476,795) in view of Koripella et al. (US 6,387,559). The Applicant presents claim 1 as a representative claim of the grouping.

Claim 1 reads as follows:

1. A wireless optical navigation device comprising:
an optical position tracking system;
a transmitter electrically coupled to said optical position tracking system; and

Art Unit: 2629

a micro fuel cell electrically coupled to said transmitter and said optical position tracking system, said micro fuel cell capable of providing electrical power for said optical position tracking system and said transmitter.

The Examiner submitted the following regarding claim 1, in the an office action dated January 12th, 2006:

With respect to claim 1, Derocher discloses, a wireless optical navigation device (fig. 2) comprising: an optical position tracking system (col. 3, lines 40-43); a transmitter electrically coupled to said optical position tracking system (52 in fig. 2).

Derocher does not expressly disclose a micro fuel cell electrically coupled to said transmitter and said optical position tracking system, said micro fuel cell capable of providing electrical power for said optical position tracking system and said transmitter.

Koripella discloses a micro fuel cell (fig. 3) electrically capable of providing electrical power (col. 6, lines 1-4).

Derocher and Koripella are analogous art because they are directed at a similar problem solving area, namely powering handheld electronic devices (Koripella, 60 in fig. 3).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the portable device fuel cell taught by Koripella on the wireless optical mouse disclosed by Derocher.

The motivation for doing so would have been to lengthen the battery life of the device and thus decrease the frequency that the battery needs to be recharged.

Therefore it would have been obvious to combine Koripella with Derocher for the benefit of longer battery life to obtain the invention as specified in claim 1.

To summarize and show graphically please note the following figures from Koripella and Derocher, respectively.

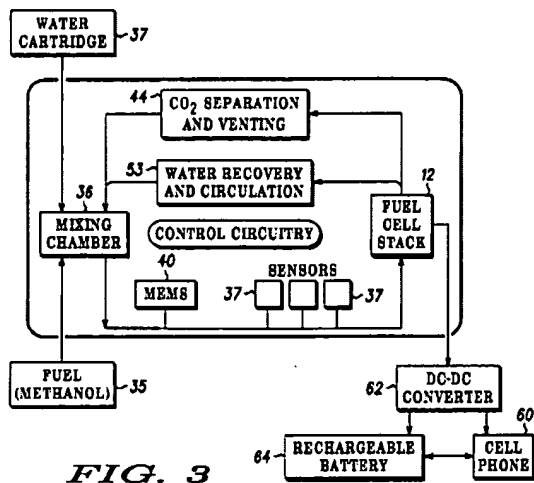


FIG. 3

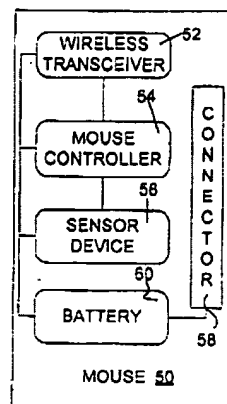
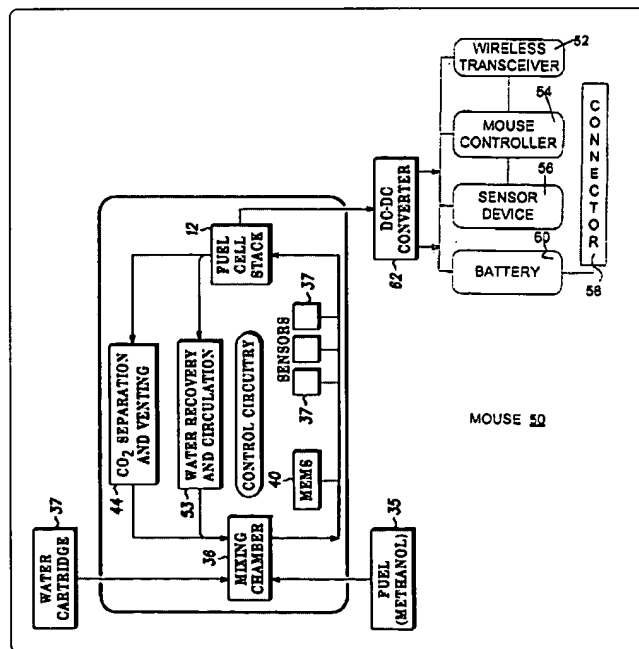


Fig. 2

The basis of the rejection is that it would have been obvious to one of ordinary skill in the art, once presented with these figures, to combine them in a manner similar to the following combination of figures 3 and 2 of Koripella and Derocher.



A.1.i The Proposed Combination Does Not Teach all of the Features of Claim 1

On pages 9-10 of the Appeal Brief the Applicants argue that neither Derocher nor Koripella teach the feature that a micro fuel cell is electrically coupled to a transmitter and to a optical position tracking system.

The Examiner respectfully disagrees. As previously stated, in an office action dated January 12th, 2006, Koripella provides power for a portable electronic device by coupling both a micro fuel cell and a rechargeable battery to the device. Derocher provides power for an optical position tracking system and a transmitter via a rechargeable battery, solely. Supplementing Derocher's rechargeable battery power with a micro fuel cell, as taught by Koripella, would inherently couple the micro fuel cell to the optical position tracking system and transmitter of Derocher.

A.1.ii The Proposed Combination Changes the Principle of Operation of the Primary Reference

On pages 10-11 of the Appeal Brief the Applicants argue that the addition of Koripella to Derocher would change the principle operation of Derocher.

The Examiner respectfully disagrees. As shown in Koripella the fuel cell is used in addition to the power of the rechargeable battery. Combining Koripella's fuel cell with the existing rechargeable battery system of Derocher would not change the principle idea of Derocher. Derocher's system would still be able to recharge the mouse rechargeable battery, and solve the problem stated by Derocher of requiring the user to carry several replacement batteries. In addition, with the fuel cell *supplementing* the

rechargeable power of Derocher (similar to the situation disclosed by Koripella), the mouse would be able to operate for longer periods between charges.

A.1.iii The Examiner Has Not Stated a Proper Teaching, Suggestion or Motivation to Combine the References

On pages 11-12 the Applicants argue that the Examiner has not stated a proper teaching, suggestion or motivation to combine the references. Specifically the Applicants argue that the proposed motivation of extending the battery life of the rechargeable battery does not exist. The Applicants claim that Derocher would have no need to extend the battery life of the mouse. The Applicants additionally argue that because the motivation is not found within either reference, and as such fails to complete a *prima facie* obviousness rejection.

The Examiner respectfully disagrees. Simply because Derocher teaches a rechargeable battery does not overcome the fact that the batteries will still require recharging at the end of their life. The addition of Koripella's fuel cell teaching would lengthen the time between required recharges; this has clear benefits. Also note that the recharging process draws its power from the laptop battery of Derocher. Thus each recharge of the mouse depletes a laptop power source that is already limited. This makes the advantage of limiting the times the mouse requires recharging even more obvious.

To the Applicants' argument that the motivation is simply a "hypothetical advantage of combining the references based on the examiner's opinion," the Examiner disagrees.

A proper motivation for a *prima facie* obviousness rejection does not have to be found in the prior art references used in the rejection. It is acceptable therefore for the motivation to be knowledge generally available to one of ordinary skill in the art at the time of the invention. In this case, the motivation of increasing the time between recharges of a portable wireless device is a well-known motivation of those of ordinary skill in the art at the time of the invention.

A.1.iv The Examiner Has Not Stated a Proper Teaching, Suggestion or Motivation to Combine the References

On pages 12-13 of the Appeal Brief the Applicant again argues that Derocher has no need to include a fuel cell in the rechargeable mouse, and that Koripella provides no reason to add a fuel cell to the wireless mouse of Derocher. As such, the Applicants claim that Derocher would not motivate one to look to Koripella.

As stated previously, motivation is not required within the prior art. The test is simply what the prior art would have suggested to one of ordinary skill in the art at the time of the invention. In this case, it seems obvious to the Examiner that where one of ordinary skill in the art presented both the Derocher and Koripella patents they would have been motivated to include a fuel cell in the mouse of Derocher. An obvious motivation for this combination would have been to lengthen the time between battery recharges.

A.1.v The Examiner Has Not Stated a Proper Teaching, Suggestion or Motivation to Combine the References

On page 13 of the Appeal Brief, the Applicants again argue that both Derocher and Koripella are complete solutions to the problems each solves. Therefore there is no need to extend the lifetime of the mouse batteries, because Derocher teaches a quick and easy way to recharge the batteries.

The Examiner again disagrees. The recharging process of Derocher still requires that the user not operate the mouse for a finite time. Furthermore using a limited power supply, in the laptop battery, to recharge the mouse further motivates the user to limit the number of recharges. The addition of a fuel cell, as taught by Koripella, would help to alleviate the number of recharges.

A.1.vi The Examiner Used Impermissible Hindsight When Fashioning the Rejection

On pages 13-14 of the Appeal Brief the Applicants argue that the Examiner used impermissible hindsight in combining Koripella and Derocher.

The Examiner respectfully disagrees. So long as the combination takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Derocher teaches a wireless, optical, rechargeable mouse. Koripella teaches a fuel cell that supplements a rechargeable battery for powering a portable electronic device. Derocher's battery requires recharging that draws power from an already limited laptop battery. Thus there is obviously a need for a rechargeable mouse that

Art Unit: 2629

operates longer in-between charges. A solution, clear to those of ordinary skill in the art, is the inclusion of a fuel cell as taught by Koripella. With each of these simple facts available at the time of the invention, the Examiner fails to see how this could be perceived as improper hindsight.

A.1.vii Derocher and Koripella Would Not be Combined By One of Ordinary Skill in the Art Because They Address Different Problems

On pages 14-17 of the Appeal Brief the Applicant argues that Koripella and Derocher address different problems and as such are non-analogous art.

In response to Applicants' argument that Derocher and Koripella are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention.

In this case, Koripella and Derocher are both directed to a similar problem solving area, providing a rechargeable and long lasting power supply to a handheld wireless portable device. The Applicants' problem is, the short battery life of batteries used in wireless optical navigation devices (page 1; lines 7-16 of the specification). It is this problem which is analogous to Derocher (overcoming the user having to carry batteries to replace failing batteries of a wireless optical navigation device, col. 2, 50-54) and to Koripella (overcoming constant recharges of batteries by miniaturizing a fuel cell to supplement the power supplied by a rechargeable battery to a portable wireless electronic device). It seems clear to the Examiner that Koripella and Derocher are both

Art Unit: 2629

reasonably pertinent to the Applicant's problem of extending battery life in wireless optical navigation devices, as well as pertinent to each other.

To further explain, both Derocher and Koripella are directed to the Applicants' current problem of effectively and efficiently supplying rechargeable power to wireless portable devices. While Koripella solves this problem by jointly a micro fuel cell and a rechargeable battery and Derocher focuses solely on a rechargeable battery, the end goal is identical, to provide a rechargeable power supply to a wireless portable device.

**A.1.viii The Age of the References Proves that No Teaching,
Suggestion, or Motivation Exists to Combine the References to Achieve the
Invention of Claim 1**

On pages 17-19 of the Appeal Brief the Applicants argue that due to the age of the references prove that it would have *not* been obvious to combine the two pieces of art. The Applicants point to two, newly introduced, pieces of art that allegedly disclose micro fuel cell technology and wireless computer mice. The more recent of the two patents dates to the year 1986. The Applicants claim that since "thousands of engineers" have not created and marketed the claimed invention in the years since these prior art references it *must* not be obvious. The Applicants offer exhaust water from a fuel cell as a possible source as to why the claimed invention would have been non-obvious.

In response, these two new references have never been relied upon by the Examiner. It is the teachings of Derocher and Koripella that are relied upon for the rejection and it is the combination of these pieces of art that provide sufficient

Art Unit: 2629

disclosures to make it obvious to combine the two pieces of art. Both Derocher and Koripella were filed in 2000 only 3 years prior to the Applicants' filing.

Furthermore and most importantly contentions that the reference patents are old are not impressive absent a *showing* that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the references.

The Applicants additionally claim that exhaust water from a fuel cell would have been motivation to not include a fuel cell in the mouse, due to the harm water causes sensitive electronics. First, note that Koripella discloses use of the device in a portable electronic device. Clearly Koripella is not concerned with exhaust water harming sensitive electronics. The reason for this becomes clear, when Koripella points out that no water is exhausted from the fuel cell. The water/methanol mixture is recirculated through the fuel cell. The only thing exhausted from the fuel cell is carbon dioxide gas.

Next, gas 48 is expelled through an exhaust outlet 52, such as a gas permeable membrane and water/methanol mixture 46 is recirculated through a recirculating channel 53, having included as a part thereof a pump 54, such as a MEMS pump, or check valve type assembly, back to mixing chamber 36.

(Koripella; col. 3, line 58 – col. 4, line 10)

It does not seem reasonable that simply the exhaust of carbon dioxide gas would be sufficient enough to motivate one of ordinary skill in the art to avoid inserting a fuel cell into a mouse.

A.1.ix Summary of Why the Examiner Has Failed to State a *Prima facie* Obviousness Rejection against Claim 1.

On page 19 of the Appeal Brief the Applicants summarize their arguments claiming that a proper *prima facie* case for obviousness has not been made by the Examiner.

As shown above, the merits of the rejection are seen as sufficient and proper. All limitations of the claim are met by the proposed combination, the two pieces of art address a common problem, the combination merely *augments* the primary reference, not destroy it, proper motivation exists in lengthening the time between battery recharges, improper hindsight was avoided; and finally absent some showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the reference, age of the references is a non-factor.

A.1.x Remaining Claims

On page 19 of the Appeal Brief the Applicant argues that as claims 2-9 and 12-20 are dependent upon claim 1, they are improperly rejected for the same reasons claim 1's rejection is seen as defective.

In response, note the above discussion, in which the claim 1 rejection is seen as proper. As such the rejections of claims 2-9 and 12-20 are seen as being proper.

A.2 Specific Rebuttals to the Examiners Assertions Made in the Office Action of January 12, 2006.

In section A.2, pages 20-25 of the Appeal Brief, the Applicants rebut specific arguments made in an office action dated January 12th, 2006.

A.2.i The Proposed Combination Does Not Teach All of the Features of Claim 1

On pages 20-21 of the Appeal Brief the Applicants once again argue that the proposed combination does not teach all the limitations of claim 1.

Please note the prior rebuttal of this argument in section A.1.i.

The Applicants' further argue that the combination would be unworkable and because a fuel cell would damage Derocher's device.

As shown above, the addition of a fuel cell to a portable wireless device has been successfully accomplished by Koripella. Therefore the Examiner fails to see how using a fuel cell, that has been described as designed for use in "powering a portable electronic device, such as a cell phone", will either damage or destroy a wireless optical mouse.

A.2.ii The Proposed Combination Changes the Principle of Operation of the Primary Reference

On pages 21-22 of the Appeal Brief, the Applicants argue that substitution of the rechargeable battery of Derocher with the fuel cell of Koripella would change the principle operation of Derocher.

The Examiner agrees that if the rechargeable battery of Derocher were removed and swapped for a fuel cell, this indeed would change the principle operation of Derocher. However, this is not the proposed incorporation of the teachings of Koripella into Derocher's mouse. As shown above in section A.1, Koripella teaches both a fuel cell and a rechargeable battery. The fuel cell works to supplement the power supplied by the rechargeable battery.

The thus obvious combination of the two devices is to *supplement* the rechargeable battery of Derocher with the teachings of Koripella, which teach the inclusion of a fuel cell. The Examiner never proposes completely removing the rechargeable battery of Derocher. The only alteration to Derocher's mouse is the *addition* of a fuel cell.

A.2.iii No Teaching, Suggestion, or Motivation Exists to Combine the References

In this subsection, the Applicants again argue that there is no motivation to combine the references.

As to the Applicants claim that no motivation exists please refer to the rebuttal of this argument above in subsection A.1.iii.

A.2.iv The Examiner Used Impermissible Hindsight When Fashioning the Rejection

On pages 23-24, the Applicants again argue that impermissible hindsight was used to fashion the rejection.

In response please note the above rebuttal in subsection A.1.vi.

The Applicants further argue that the combination of "two wholly distinct" means, fuel cells added to rechargeable batteries, would render Derocher's device of recharging batteries, pointless.

This argument is groundless. As stated above in subsection A.2.ii the fuel cell is the only part of Koripella that is intended to be included in Derocher. The rechargeable batteries and method of recharging them is maintained in the proposed combination. In

Art Unit: 2629

short a fuel cell is meant to supplement the Derocher device, not replace the batteries of Derocher.

A.2.v Koripella is Non-Analogous Art

On pages 24-26, the Applicants argue that Derocher and Koripella are not analogous art. Specifically, the Applicants argue that the Examiner's concept of analogous art is overly broad, claiming that the devices themselves must be considered and not a broad category into which both devices fit.

As stated above in section A.1.vii, Derocher and Koripella are seen as addressing a similar problem with analogous goals and ends.

To further rebut the argument, Derocher and Koripella aim to provide an effective and sufficient rechargeable power supply for a wireless portable device. Koripella expressly discloses, using the fuel cell for "powering a portable electronic device," (col. 6, line 4). The cell phone embodiment shown in figure 3 is merely an example of such a device.

A.2.vi Summary of Rebuttal Arguments to the Examiner's Assertions in the Office Action of January 12, 2006

On page 26 of the Appeal Brief the Applicants summarize their arguments claiming that a proper *prima facie* case for obviousness has not been made by the Examiner.

As shown above, the merits of the rejection are seen as sufficient and proper. All limitations of the claim are met by the proposed combination, the two pieces of art address a common problem, the combination merely *augments* the primary reference,

not destroy it, proper motivation exists in lengthening the time between battery recharges, improper hindsight was avoided; and finally absent some showing that the art tried and failed to solve the same problem notwithstanding its presumed knowledge of the reference, age of the references is a non-factor.

A.3. Specific rebuttals to the Examiner's Assertions Made in the Final Office Action of May 31, 2006.

In section A.3, pages 26-34 of the Appeal Brief, the Applicants rebut specific arguments made in an office action dated May 31st, 2006.

A.3.i. "Uncombinable Argument"

On pages 27-28, the Applicant once again argues that the combination of the two devices would destroy the Derocher reference, as exhaust water from the fuel cell of Koripella would harm the sensitive electronics of Derocher.

As shown above in subsection A.1.viii, the water of Koripella is not exhausted; it is recycled back into the fuel cell.

A.3.ii. "Changes Principles of Operation Argument"

On pages 28-29, the Applicants again argue the proposed combination would change the principle of operation of the Derocher device. The Applicant further claims that even if the fuel cell were used to supplement the rechargeable battery of Derocher, this would change how the battery is recharged.

In response, please note the prior discussion of this argument in subsection A.2.ii. Additionally, the Examiner fails to see why a mouse of Derocher including a fuel cell would not be able to function as disclosed by Derocher. Clearly Koripella's

Art Unit: 2629

embodiment utilizing a cell phone having a rechargeable battery still functions.

Therefore there is no reason to believe that Derocher's mouse would not be able to still recharge as described when a fuel cell is used to augment the power supply of the mouse.

A.3.iii. "Hindsight Argument"

On pages 29-30 the Applicants again argue that impermissible hindsight was used to fashion the rejection. Specifically, the Applicants argue that the need to lengthen the time between recharges of the mouse is not needed. The Applicants claims that a conventional mouse can operate for months without replacing a AA battery.

In response, Derocher states that his motivation for using rechargeable batteries is to "prevent the user from having to carry a supply of replacement batteries" (col. 2, lines 50-53). If as the Applicants claim a conventional mouse can operate for months without replacing a AA battery, it seems unlikely that a user would carry a supply of several replacement batteries. Additionally it is worth noting that the power from which the mouse recharges is in limited supply. The mouse battery is recharged using laptop battery power. It is well-known that laptop batteries are limited in their lifetime, as such it would be desired to keep the devices which request power from the laptop battery as low and as infrequent as possible.

A.3.iv. "Non-Analogous Art Argument"

On pages 31-32, the Applicants again argue that Koripella and Derocher are non-analogous art.

In response please note the discussion of this argument in sections A.1.vii and A.2.v. The Applicants continue to focus on the example of the *In re Oetiker* case, which found that garment fasteners couldn't be considered analogous to hose clamp fasteners. Along the same lines the Applicants claim that the cell phone embodiment of Koripella is not similar enough to the mouse of Derocher. However, both can be narrowly described as rechargeable, electronic, personal, portable, handheld, button-operated, wireless transmission devices. This is vastly different from the comparison between garments and hose clamps, where there is no overlap whatsoever amongst the actual objects being fastened. As such the Examiner maintains that Derocher and Koripella are analogous art, as they both focus on the same problem of supplying long-lasting rechargeable power to wireless portable devices.

A.3.v. "Length of Time Argument"

On pages 32-34, the Applicants again argue that due to the ages of the references that there is a lack of motivation as no one has combined the references before. Specifically the Applicants argue that:

One of ordinary skill has had *Koripella* and *Derocher* at their disposal for over *twenty* years, yet no one has combined the references to achieve the invention of claim 1. If combining the references was as "simple" and "obvious" as the examiner asserts, then one of ordinary skill would have already done so.

Page 33-34 of Appeal Brief.

The Examiner must again point out that Koripella and Derocher were only known at the earliest in the year 2000. The twenty years to which the Applicants refer are determined from references that have never been presented by the Examiner. As the

Art Unit: 2629

rejection of claim 1 is based on the disclosures of Koripella and Derocher, one of ordinary skill has only had these teachings at their disposal for 3 years prior to the Applicants' filing. Furthermore, as stated in above subsections, absent some teaching that one of ordinary skill in the art tried and failed to combine the two teachings of Koripella and Derocher this argument is seen as unpersuasive.

B. GROUND OF REJECTION 2 (Claim 10)

On page 34, the Applicants argue that as claim 10 is dependent upon claim 1 the rejection is without merit. Furthermore the Applicant argues that simply because Hirsch is only used to teach a specific feature this proves that the Examiner is merely picking and choosing elements from the prior art.

In response, as shown above the rejection of claim 1 is seen as proper. Furthermore, the Applicants do not offer any real evidence as to why the claim 10 rejection is improper. The reason the rejection states Hirsch discloses only one limitation of the claim 10 is because all of the other limitations were disclosed by the combination of Koripella and Derocher.

C. GROUND OF REJECTION 3 (Claim 11)

On page 35, the Applicants argue that as claim 11 is dependent upon claim 1 the rejection is without merit. Furthermore the Applicant argues that simply because Peng is only used to teach a specific feature this proves that the Examiner is merely picking and choosing elements from the prior art.

In response, as shown above the rejection of claim 1 is seen as proper. Furthermore, the Applicants do not offer any real evidence as to why the claim 11

Art Unit: 2629

rejection is improper. The reason the rejection states Peng discloses only one limitation of the claim 11 is because all of the other limitations were disclosed by the combination of Koripella and Derocher.

D. GROUND OF REJECTION 4 (Claim 13)

On page 35, the Applicants argue that as claim 13 is dependent upon claim 1 the rejection is without merit. Furthermore the Applicant argues that simply because Freathy is only used to teach a specific feature this proves that the Examiner is merely picking and choosing elements from the prior art.

In response, as shown above the rejection of claim 1 is seen as proper. Furthermore, the Applicants do not offer any real evidence as to why the claim 13 rejection is improper. The reason the rejection states Freathy discloses only one limitation of the claim 13 is because all of the other limitations were disclosed by the combination of Koripella and Derocher.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

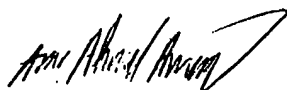
William Lee Boddie



Conferees:

SL

Amr Awad, Sumati Lefkowitz



AMR A. AWAD
SUPERVISORY PATENT EXAMINER